UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,766	01/15/2002	Nachiappan Annamalai	ARIBP049	5172
	7590 05/19/200 [& JAMES LLP	8	EXAMINER	
10050 N. FOOT	ΓHILL BLVD #200		SHRESTHA, BIJENDRA K	
CUPERTINO, CA 95014			ART UNIT	PAPER NUMBER
			3691	
			MAIL DATE	DELIVERY MODE
			05/19/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary		Applica	ation No.	Applicant(s)		
		10/047	,766	ANNAMALAI ET	ANNAMALAI ET AL.	
		Examir	ıer	Art Unit		
		BIJEN	ORA K. SHRESTHA	3691		
Period fo	The MAILING DATE of this communica or Reply	tion appears on	the cover sheet with t	the correspondence a	ddress	
WHIC - Exter after - If NC - Failu Any r	ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MAIL asions of time may be available under the provisions of 3 SIX (6) MONTHS from the mailing date of this community period for reply is specified above, the maximum statute the to reply within the set or extended period for reply will, eply received by the Office later than three months after ad patent term adjustment. See 37 CFR 1.704(b).	ING DATE OF 7 CFR 1.136(a). In no cation. by period will apply and by statute, cause the	THIS COMMUNICAT event, however, may a reply d will expire SIX (6) MONTHS application to become ABAND	TION. be timely filed from the mailing date of this DONED (35 U.S.C. § 133).		
Status						
2a)⊠	Responsive to communication(s) filed of This action is FINAL . 2b) Since this application is in condition for closed in accordance with the practice	☐ This action is allowance exce	s non-final. ept for formal matters	•	e merits is	
Dispositi	on of Claims					
5)□ 6)⊠ 7)□ 8)□ Applicati 9)□	Claim(s) 1-32 is/are pending in the app 4a) Of the above claim(s) is/are valued. Claim(s) is/are allowed. Claim(s) 1-32 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction on Papers The specification is objected to by the E The drawing(s) filed on is/are: ay Applicant may not request that any objection	withdrawn from n and/or election xaminer. D□ accepted or	n requirement. b)∏ objected to by t			
44)	Replacement drawing sheet(s) including the			•	• •	
•	The oath or declaration is objected to by	/ the ⊏xammer.	Note the attached Of	ince Action or form P	10-152.	
Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some colon None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
2) Notic 3) Inform	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO- nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date	948)	Paper No(s)/Ma	mary (PTO-413) ail Date mal Patent Application		

Art Unit: 3691

DETAILED ACTION

Claims 1-32 are presented for examination. Applicant filed an amendment on 01/25/2008. Applicant's arguments with respect to claims have been considered but found not persuasive. Examiner maintains the grounds rejection of claims in the instant application as set forth in detail below.

Information Disclosure Statement

The Applicant is requested to limit the number of references relevant to the instant application in order to be considered in the prosecution of the application.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1-32 are rejected under 35 U.S.C. 102(e) as being unpatentable by Davenport et al., U.S. Pub No. 2003/0033236 (reference A in attached PTO-892).
- 3. As per claim 1, Davenport et al. teach a method for multiple award optimization bidding in online auctions (see Fig. 1) comprising:

providing, by the buyer, a price ceiling and a tolerance for a resource; soliciting a plurality of bids from a plurality of suppliers, the bids having a unit price and a quantity (see Fig. 1; paragraph [0036]);

validating the bids if the bids meet a set of rules; generating an optimal solution with the validated bids (see Fig. 3; paragraph [0036] and [0040]);

the optimal solution having an optimal quantity and an optimal unit price from at least one supplier; comparing the optimal unit price to a compare value; and

replacing the compare value with the optimal unit price if the optimal unit price is less than the compare value (see paragraph [0081-0082] and [0093]; where Bid B1of Supplier1 is a optimal solution having optimal quantities of items {1,2,3} which is obtained by comparing prices and quantities of Bid2 of Supplier2 and Bid3 of Supplier3 and their time of the bids).

4. As per claim 2, Davenport et al. teach claim 1 as described above. Davenport et al. teach the method comprising:

rejecting the bids if the bids do not meet the set of rules; and denying the bids if at least one of an optimal solution cannot be generated and the optimal unit price is not less than the compare value (see paragraph [0066].

5. As per claim 3, Davenport et al. teach claim 1 as described above. Davenport et al. teach the method wherein the validating comprises:

calculating a total cost of each bid; evaluating the quantity of each bid against a quantity of another supplier's bid and the unit price of each bid against a unit price of another supplier's bid; checking the quantity of each bid against a quantity of a previous

bid and the total cost of each bid against a previous total cost (see paragraph [0081] and [0082]);

comparing the unit price for each bid against the price ceiling (see paragraph [0066]); and

rejecting the bid if the bid does not meet the set of rules, the set of rules including the unit price of the bid not being less than the price ceiling, the quantity of the bid not being less than the quantity of a previous bid and the total cost of the bid not being greater than the previous total cost, and the quantity of the bid not being equal to the quantity of at least one other supplier's bid and the unit price of the bid not being equal to the unit price of at least one other supplier's bid (see paragraph [0040]).

6. As per claim 4, Davenport et al. teach claim 1 as described above. Davenport et al. further teach the method wherein the generating comprises:

using non-linear programming to determine a decision variable for each bid; including each bid having the decision variable that matches an optimal parameter in the optimal solution; and calculating the optimal unit price and the optimal quantity from the included bids (see paragraph [0081] and [0082]).

7. As per claim 5, Davenport et al. teach claim 1 as described above. Davenport et al. further teach the method wherein the generating comprises:

minimizing the optimal unit price; and maximizing the optimal quantity (see paragraph [0036], [0081] and [0082]).

8. As per claim 4, Davenport et al. teach claim 1 as described above. Davenport et al. further teach the method wherein the generating comprises:

Art Unit: 3691

assigning a decision variable matching the optimal parameter to a bid from a preferred supplier (see Fig. 2; paragraph [0038]; page 6, column 2, claim 1); and calculating the optimal solution to include the bid from the preferred supplier (see Fig 2 and 3; paragraph [0036]).

9. As per claim 7, Davenport et al. teach claim 1 as described above. Davenport et al. further teach the method wherein the generating comprises:

calculating the optimal solution based upon at least one of a minimum number and maximum number of suppliers chosen by the buyer (see Fig. 2, step 201; paragraph [0073]).

10. As per claim 8, Davenport et al. teach claim 1 as described above. Davenport et al. further teach the method comprising:

notifying the suppliers of the bids in the optimal solution (see Fig. 2, step 204;Paragraph [0038]); and

refreshing a display of the bids with each new bid (see Fig. 2, step 206; paragraph [0039] and [0083]).

11. As per claim 9, Davenport et al. teach claim 8 as described above. Davenport et al. further teach the method wherein the notifying comprises:

displaying a ranked ordering of submitted bids in accordance with the optimal solution (see paragraph [0038] and [0039]; the Examiner interprets feedback to the bidders displays a ranked ordering of the submitted bids).

12. As per claim 10, Davenport et al. teach claim 1 as described above. Davenport et al. further teach the method wherein the soliciting comprises:

identifying at least one of goods and services to be purchased (see paragraph [0004]).

13. As per claim 11, Davenport et al. teach claim 1 as described above. Davenport et al. further teach the method comprising:

notifying the bidders that the bids are not accepted if a total quantity calculated from the quantity from all bids does not meet the tolerance (see paragraph [0038]; the examiner interprets that the feedback is provided to all of the bidders).

14. As per claim 12, Davenport et al. teach claim 1 as described above. Davenport et al. further teach the method comprising:

allowing the buyer to change the tolerance if at least one of the bids is not validated and the optimal solution is not generated (see paragraph [0080]).

15. As per claim 12, Davenport et al. teach claim 1 as described above. Davenport et al. further teach the method comprising wherein the soliciting comprises:

providing a range of values for at least one of the quantity and the unit price (see paragraph [0072]).

16. As per claim 14, Davenport et al. teach claim 1 as described above. Davenport et al. further teach the method wherein the generating comprises:

calculating the optimal solution based on at least one of payment terms, cost, percentage, lead time, discounts and other parameters that are quantifiable as numbers (see paragraph [0048]).

17. As per claim 15, Davenport et al. teach claim 1 as described above. Davenport et al. further teach the method wherein the generating comprises:

determining, as the optimal solution, a lowest overall optimal solution set of bids; and providing the optimal quantity and the optimal unit price, the optimal quantity being a sum of quantities from the solution set of bids and the optimal unit price being an average of the unit prices from the solution set of bids (see paragraph [0081] and [0082]).

18. As per claim 16, Davenport et al. teach a method for multiple award optimization bidding in online auctions comprising:

providing, by the buyer, a price ceiling and a tolerance for a resource; soliciting a plurality of bids from a plurality of suppliers, the bids having a unit price, a quantity, and a total cost (see Fig. 1; paragraph [0036]);

accepting a most recent bid from a bidder (see paragraph [0083] and [0093]; calculating a total cost for the most recent bid; comparing the unit price for the most recent bid against the price ceiling (see paragraph [0081] and [0082];

checking the quantity of the most recent bid against a quantity of a previous bid from the bidder and the total cost of the most recent bid against a previous total cost of the bidder; evaluating the quantity of the most recent bid against a quantity of another supplier's bid and the unit price of the most recent bid against a unit price of another supplier's bid; rejecting the bid if at least one of the unit price of the most recent bid is not less than the price ceiling, the quantity of the most recent bid is less than the quantity of the previous bid from the bidder and the total cost of the most recent bid is greater than the previous total cost of the bidder, and the quantity of the most recent bid

is equal to the quantity of current bids from at least one other supplier and the unit price of the most recent bid is equal to the unit price of the current bids from at least one other supplier (see paragraph [0093]);

determining a decision variable for the current bids and the most recent bid if the most recent bid is not rejected (see paragraph [0083]);

generating an optimal solution from a lowest overall optimal solution set of the most recent bid that satisfies an objective function and constraints and the current bids that satisfies an objective function and constraints, the optimal solution having an optimal quantity, an optimal unit price and an optimal parameter, the optimal quantity being a sum of quantities from an optimal solution set of bids, the optimal unit price being an average of the unit price from the solution set of bids (see paragraph [0081-0082] and [0093]; where Bid B1of Supplier1 is a optimal solution having optimal quantities of items {1,2,3} which is obtained by comparing prices and quantities of Bid2 of Supplier2 and Bid3 of Supplier3 and their time of the bids);

denying the most recent bid if an optimal solution cannot be generated; comparing the optimal unit price to a compare value (see paragraph [0083]);

evaluating whether the decision variable of the most recent bid matches the optimal parameter; replacing the compare value with the optimal unit price if the optimal unit price is not equal to the compare value and the decision variable of the most recent bid matches the optimal parameter (see paragraph [0081], [0082] and [0083]);

notifying the suppliers, in real time, that the most recent bid is in the optimal solution if the decision variable matches the optimal parameter (see paragraph [0038] and [0039]); and

accepting the most recent bid if the decision variable does not match the optimal parameter (see paragraph [0083]).

19. As per claim 17, Davenport teach a method for bidders to determine an optimal bid comprising:

providing, by the buyer, a price ceiling and a tolerance for a resource (see Fig. 1; paragraph [0036]);

receiving at least one bid from a supplier, the bid having a unit price and a quantity; inputting a value for one of a new unit price and a new quantity; generating an optimal bid using the inputted value (see paragraph [0081] and [0082]; where bids received from suppliers with item price and bid B1 is determined to be an optimal bid); and

supplying at least one of a corresponding value necessary to reach the optimal bid and a no feasible solution result (see paragraph [0082], [0083] and [0093]; where time of bid is a determining factor when two potential optimal solutions are obtained).

20. As per claim 18, Davenport et al. teach claim 17 as described above. Davenport et al. further teach the method wherein the tolerance includes a maximum quantity and a minimum quantity and the supplying comprises:

rejecting the value if at least one of the new unit price is greater than the price ceiling, the new quantity is less than the minimum quantity, and the new quantity is greater than the maximum quantity and requesting a different value(see paragraph [0072],[0083]).

21. As per claim 19, Davenport et al. teach claim 17 as described above. Davenport et al. further teach the method wherein the generating comprises:

using non-linear programming to determine a decision variable that matches an optimal parameter; and calculating one of an optimal unit price and an optimal quantity (see paragraph [0082]).

22. As per claim 20, Davenport et al. teach claim 17 as described above. Davenport et al. further teach the method wherein the generating comprises:

minimizing the corresponding value if the inputted value is a new unit price (see paragraph [0083]; and

maximizing the corresponding value if the inputted value is a new quantity (see paragraph [0072]).

23. As per claim 21, Davenport t al. teach a system for multiple award optimization bidding in online auctions (see Fig. 1) comprising:

database for receiving and storing a price ceiling and a tolerance from a buyer and a plurality of bids from a plurality of suppliers for a resource, the bids having a unit price and a quantity (see Fig. 3, step 300; paragraph [0040]); and

software for validating the bids and generating an optimal solution(see Fig.3, step 304; paragraph [0036] and [0040]),

the optimal solution having an optimal quantity, an optimal unit price and an optimal parameter (see paragraph [0081-0082] and [0093]; where Bid B1of Supplier1 is a optimal solution having optimal quantities of items {1,2,3} which is obtained by comparing prices and quantities of Bid2 of Supplier2 and Bid3 of Supplier3 and their time of the bids).

24. As per claim 22, Davenport et al. teach claim 21 as described above. Davenport et al. further teach the system wherein

the tolerance comprises a maximum quantity and a minimum quantity (see paragraph [0072]).

25. As per claim 23, Davenport et al. teach claim 21 as described above. Davenport et al. further teach the system wherein

the software compares the optimal unit price to a compare value, and replaces the compare value with the optimal unit price if the optimal unit price is less than the compare value and the optimal parameter matches a constraint (see paragraph [0083]).

26. As per claim 24, Davenport et al. teach claim 21 as described above. Davenport et al. further teach the system wherein

the software calculates a total cost of each bid, compares the unit price for each bid against the price ceiling, checks the quantity of each bid against a quantity of a previous bid and the total cost of each bid against a previous total cost, evaluates the quantity of each bid against a quantity of another supplier's bid and the unit price of

Art Unit: 3691

each bid against a unit price of another supplier's bid, rejects the bid if the bid does not meet a set of rules that include the unit price of the bid not being less than the price ceiling, the quantity of the bid not being less than the quantity of a previous bid and the total cost of the bid not being greater than the previous total cost, and the quantity of the bid not being equal to the quantity of at least one other supplier's bid and the unit price of the bid not being equal to the unit price of at least one other supplier's bid (see paragraph [0081] and [0082]).

27. As per claim 25, Davenport et al. teach claim 21 as described above. Davenport et al. further teach the system wherein

the software receives a value for one of a new unit price and a new quantity, generates an optimal bid using the value, and supplies at least one of a corresponding value necessary to reach the optimal bid and a no feasible solution result (see paragraph [0080]).

28. As per claim 26, Davenport et al. teach claim 21 as described above. Davenport et al. further teach the system wherein

the optimal quantity is a sum of quantities from an optimal solution set of bids, the optimal unit price is an average of the unit price from the solution set of bids, and the optimal parameter is a decision variable (see paragraph [0081] and [0083]).

29. As per claim 27, Davenport et al. teach a machine readable medium for multiple award optimization bidding in online auctions comprising:

Art Unit: 3691

a first machine readable code that receives and stores a price ceiling and a tolerance from a buyer and a plurality of bids from a plurality of suppliers for a resource, the bids having a unit price and a quantity (see Fig. 1; Server; Buyer Private Market Place (100));

a second machine readable code that validates the bids (see Fig. 1; Server (100); Fig. 3; paragraph [0040]); and

a third readable code that generates an optimal solution (see Fig. 3, step 304; paragraph [0040]),

the optimal solution having an optimal quantity, an optimal unit price, and an optimal parameter (see paragraph [0081-0082] and [0093]; where Bid B1of Supplier1 is a optimal solution having optimal quantities of items {1,2,3} which is obtained by comparing prices and quantities of Bid2 of Supplier2 and Bid3 of Supplier3 and their time of the bids).

30. As per claim 28, Davenport et al. teach claim 27 as described above. Davenport et al. further teach the machine readable medium wherein

the tolerance comprises a minimum quantity and a maximum quantity (see paragraph [0072]).

31. As per claim 29, Davenport et al. teach claim 27 as described above. Davenport et al. further teach the machine readable medium wherein

the optimal solution is generated by minimizing the optimal unit price and number of suppliers and maximizing the optimal quantity (see paragraph [0036], [0072], [0081] and [0082]).

Art Unit: 3691

32. As per claim 30, Davenport et al. teach claim 27 as described above. Davenport et al. further teach the machine readable medium wherein

the optimal quantity is a sum of quantities from a combination of bids, the optimal unit price is an average of the unit price from the combination of bids, and the optimal parameter is a decision variable (see paragraph [0082]).

33. As per claim 31, Davenport et al. teach claim 27 as described above. Davenport et al. further teach the machine readable medium wherein

the bids are validated by calculating a total cost of each bid, comparing the unit price for each bid against the price ceiling, checking the quantity of each bid against a quantity of a previous bid and the total cost of each bid against a quantity of another a previous total cost, evaluating the quantity of each bid against a quantity of another supplier's bid and the unit price of each bid against a unit price of another supplier's bid and rejecting the bid if the bid does not meet the set of rules, including the unit price of the bid not being less than the price ceiling, the quantity of the bid not being less than the quantity of a previous bid and the total cost of the bid not being greater than the previous total cost, and the quantity of the bid not being equal to the quantity of at least one other supplier's bid and the unit price of the bid not being equal to the unit price of at least one other supplier's bid (see paragraph [0081], [0082] and [0083]).

34. As per claim 32, Davenport et al. teach claim 27 as described above. Davenport et al. further teach the machine readable medium comprising

a fourth readable code that receives a value for one of a new unit price and a new quantity, generates an optimal bid using the value, and supplies at least one of a Art Unit: 3691

corresponding value necessary to reach the optimal bid and a no feasible solution result (see paragraph [0080]).

Response to Arguments

35. Applicant's arguments with respect to claims have been considered but found not persuasive. Examiner maintains the grounds rejection of claims in the instant application.

As per claims 1, 16, 21 and 27, Examiner respectfully disagrees with Applicant argument that Davenport et al. do not teach generating optimum solution having an optimal quantity and optimal unit price from at least one supplier. Davenport et al teach creation of combinatorial auction to purchase quantities of items {1,2,3} and obtaining bids from Supplier1 for items {1,2,3} at a price of \$100.00, from Supplier2 for item {1} at a price \$30.00 and from Supplier3 for item {2,3} at a price of \$70.00 (see paragraph [0081] and [0082]) and generating optimal solution using Linear Programming/Integer Programming (LP/IP) (see Fig. 3, step 304). Davenport further teaches comparing bids from suppliers with bids B1, B2 and B3 and determines bid B1 as a optimal bid with optimal quantity set by combinatorial procurement auction by the purchaser (see paragraph [0081] and [0093]).

Applicant defines "Optimal Quantity" as "sum of quantities from the optimal solutions set of bids"; and the "Optimal Unit Price" as "an average of unit price from the solution set of bids" (see page 3, paragraph [0008]). Davenport et al. teach selection of optimal bid for quantities of items {1, 2, 3} for price \$100.00 from Bid B1 from Supplier1

Art Unit: 3691

and combined bids from Supplier2 and Supplier3; Supplier2 providing item {2} at price \$30.00 and Supplier3 providing items {2,3} at price \$70.00. Here, combined bid Bid2 and Bid3 is one of the optimal solution for optimal quantities of items {1, 2, 3} (which is sum of optimal Bid2 and Bid3) required by the purchaser as set in the creation of combinatorial auction.

As per claim 17, Davenport et al. teach receiving bids from Supplier 1, 2 and 3 and bids having unit price \$ 100.00, \$30 and \$70.00 for quantities of items {1, 2, 3}, {1} and {2, 3} respectively (see paragraph [0081] and inputting the values into a database (see Fig. 1) and generating optimum solution using LP/IP programming (see Fig. 3).

Conclusion

36. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 3691

The prior art made of record and not relied upon is considered pertinent to applicant's disclosures. Applicant is required under 37 CFR 1.111(c) to consider references fully when responding to this action.

The following are pertinent to current invention, though not relied upon:

Alaia et al. (U.S. Patent No. 6,199,050) teach method of and system for bidding in an electronic auction using flexible bidder-determined line-item guidelines.

Alsberg et al. (U.S. Pub No. 2001/00332162) teach methods and systems for market clearance

Heimermann et al. (U.S. Patent No. 7,110,976) teach centralized, requisition driven, order formulating, e-procurement method using reversed auction.

Jordan (U.S. Pub No. 2002/0069157)) teaches exchange fusion

La Mura et al. (U.S. Patent No. 7,058,602) teach enhanced auction mechanism for online transactions.

Rackson et al. (U.S. Patent No. 6,415,270) teach multiple auction coordination method and system.

Sandholm (U.S. Patent No. 6,272,473) teaches method, apparatus, and embodied data structures for optimal anytime winner determination in combinatorial auction-type problems.

Sobrado et al. (U.S. Patent No. 6,980,966) teach guided buying in an electronic marketplace environment.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bijendra K. Shrestha whose telephone number is (571)270-1374. The examiner can normally be reached on 7:00AM-4:30 PM (Monday-Friday); 2nd Friday OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Kalinowski can be reached on (571)272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alexander Kalinowski/ Supervisory Patent Examiner, Art Unit 3691

Art Unit: 3691